DOCKET NO.: CEPH-2313 (CP188-C)

Application No.: 10/685,923

Office Action Dated: April 13, 2005

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1 to 44 (cancelled)

45. (new) A compound having the Formula I:

$$Q \xrightarrow{\qquad \qquad (Aaa)_n \qquad (N \xrightarrow{\qquad \qquad M \qquad \qquad C \qquad })_q \qquad NH \xrightarrow{\qquad \qquad C \qquad \qquad Z}$$

wherein:

Q is (lower alkyl)-S(O)₂- or arylalkyl-OC(=O)-, said arylalkyl having from 7 to 15 carbons;

Aaa is an amino acid;

n is 0 or 1;

M is a carbon atom;

R¹ is selected from the group consisting of alkyl having from one to 6 carbons and alkoxyalkyl, said alkyl and alkoxyalkyl groups being optionally substituted with phenyl;

R² is benzyl;

R³ is H;

q is 1;

Z is -C(=O)C(=O)NH-X-A¹-K;

X is a bond;

A¹ is -CH₂-CH₂-, -CH₂-CH(CH₃)-, or -CH(CH₃)-CH₂-;

K is $-NHSO_2R^8$ or $-SO_2NH(R^8)$;

R⁸ is aryl, said aryl being substituted with one J group;

J is piperazinyl-CH₂- optionally substituted by a J¹ group;

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J¹ is selected from the group consisting of halogen, CN, nitro, lower alkyl, cycloalkyl, heterocycloalkyl, heteroalkyl, halogenated alkyl, aryloxyalkyl, alkylthio, alkylsulfonyl, aryl, heteroaryl, arylalkyl, arylalkyloxy, arylsulfonyl, heteroarylsulfonyl, alkoxycarbonyl, alkoxyalkyl, acyl, alkoxy, hydroxy, carboxy, hydroxyalkyl, amino, alkylamino, and aminoalkyl, said amino group or said amino group of said aminoalkyl or alkylamino group being optionally substituted with an acyl group, an alkoxy group, or with 1 to 3 aryl, lower alkyl, cycloalkyl, or alkoxyalkyl groups; and said aryl, heteroaryl, heterocycloalkyl, and heteroalkyl groups being further optionally substituted by a J² group; and

J² is selected from a group consisting of halogen, CN, nitro, lower alkyl, halogenated alkyl, alkylthio, alkylsulfonyl, alkoxycarbonyl, alkoxyalkyl, acyl, alkoxy, hydroxy, carboxy, hydroxyalkyl, amino, alkylamino, and aminoalkyl;

or a pharmaceutically acceptable salt thereof.

- 46. (new) The compound of claim 45, wherein Q is (lower alkyl)-S(O)₂.
- 47. (new) The compound of claim 45, wherein R¹ is -CH₂OCH₂(C₆H₅).
- 48. (new) The compound of claim 45, wherein Q is methyl-S(O)₂- and R⁸ is substituted phenyl.
- 49. (new) The compound of claim 45, wherein R¹ is -CH₂OCH₂(C₆H₅), Q is methyl-S(O)₂-, and R⁸ is substituted phenyl.
- 50. (new) A compound having the formula:

wherein

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W is selected from the group consisting of: Ms-D-Ser(Bn), Ms-L-Ser(Bn), Ms-D-Thr(Bn), Ms-D-Phe, and Cbz-Leu-Leu;

R is selected from the group consisting of:

-CH₂CH₂NHSO₂-C₆H₄-CH₂-(4-(CH₃COPh)piperazin-1-yl);

-CH₂CH₂NHSO₂-C₆H₄-CH₂-(4-(PhCH₂)piperazin-1-yl);

-CH₂CH₂NHSO₂-C₆H₄-CH₂-(4-(CH₃CO)piperazin-1-yl);

-CH₂CH₂NHSO₂-C₆H₄-CH₂-((4-pyrid-2-yl) piperazine-1-yl);

-CH₂CH₂NHSO₂-C₆H₄-CH₂-(4-ethylpiperazin-1-yl);

-CH₂CH₂NHSO₂-C₆H₄-CH₂-(4-(CH₃SO₂)piperazin-1-yl); and

-CH₂CH₂NHSO₂-C₆H₄-CH₂-((4-pyrimid-2-yl)piperazine-1-yl),

or a pharmaceutically acceptable salt thereof.

51. (new) The compound of claim 50, wherein W and R are selected in accordance with the following table:

W	R
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -(4-(CH ₃ COPh)piperazin-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -(4-(PhCH ₂)piperazin-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -(4-(CH ₃ CO)piperazin-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -((4-pyrid-2-yl) piperazine-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -(4-ethylpiperazin-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -(4-(CH ₃ SO ₂)piperazin-1-yl);
Ms-D-Ser (Bn)	-CH ₂ CH ₂ NHSO ₂ -C ₆ H ₄ -CH ₂ -((4-pyrimid-2-yl)piperazine-1-yl),
	Ms-D-Ser (Bn) Ms-D-Ser (Bn) Ms-D-Ser (Bn) Ms-D-Ser (Bn) Ms-D-Ser (Bn) Ms-D-Ser (Bn)

or a pharmaceutically accepted salt thereof.

- 52. (new) A pharmaceutical composition for inhibiting a serine protease or a cysteine protease, comprising:
 - a compound of claim 45; and
 - a pharmaceutically acceptable carrier.

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- 53. (new) A pharmaceutical composition for inhibiting a serine protease or a cysteine protease: comprising:
 - a compound of claim 50; and
 - a pharmaceutically acceptable carrier.
- 54. (new) A pharmaceutical composition for inhibiting a serine protease or a cysteine protease, comprising:
 - a compound of claim 51; and
 - a pharmaceutically acceptable carrier.